Serial No.: 09/770,074
Group Art Unit: No.: 2684

REMARKS/ARGUMENTS

Claims 1 through 15 and 17 through 24 are pending in the present application. Claim 1 is independent. Claims 2 through 15 and 17 through 20 depend from claim 1. Claims 21 and 22 are independent. Claims 23 through 24 depend from independent claim 22.

In the Action, claims 1, 2, 4, 8, 10, 13 through 15 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No.: 6,493,556 B1 to Stinson (hereinafter "Stinson") In view of United States Patent Number 6,487,172 B1 to Zonoun (hereinafter "Zonoun") and further in view of United Kingdom Patent Application Number 2,328,117 A to Hilsenrath (hereinafter "Hilsenrath). In response, applicant submits that the cited and relied upon Stinson, Zonoun, and Hilsenrath do not support a prima facie rejection of obviousness under 35 U.S.C. § 103(a).

Applicant submits that Stinson alone or in combination with Zonoun and Hilsenrath neither disclose nor suggest applicant's claimed invention. Applicant respectfully traverses this rejection on the grounds that there is no disclosure, suggestion or motivation in any reference for the modification argued by the Office. Also, Stinson, Zonoun, Hilsenrath and the combination thereof, even if technically feasible, which is not admitted as possible, do not render applicant's claimed invention obvious.

Claim 1 provides for a method of cost-sensitive control of data transfer between a mobile entity and a data network through a cellular radio infrastructure. The method comprises steps carried out at a service system. The first step (a) is of receiving a transfer descriptor. The transfer descriptor is indicative of, at least generally, the end points of a required data transfer, and transfer criteria to be met by this transfer. These criteria have at least a cost

criterion, and a delay criterion. The delay criterion is indicative of an acceptable delay before transfer initiation.

The method further has the step of (b) determining by reference to both current and future data-transfer tariffs whether and, if so, how, the data transfer can be effected within the transfer criteria. The method also has the step (c). The step (c) has where step (b) produces a positive determination, the method further instructs initiation of the data transfer in accordance therewith.

Stinson discloses a method of establishing a communication path between first and second subscriber units. The first subscriber unit is interfaced to a first communication network. The second subscriber unit is interfaced to a second communication network. The method has the steps of receiving information regarding a cost of routing data between the first and the second communication networks expressed as a function of time of day at a location of one of the first or second subscriber units.

The method further has the steps of receiving a quality of service indicator and determining a communications path between the first and the second subscriber units. This is based on an optimization of the cost of the routing and the quality of service indicator.

The quality of service indicator is identified in the specification at col. 2, lines 67 through col. 3, line 6 as the following examples: (1) "a maximum latency in data transmitted to and received from the subscriber unit"; (2) "a minimum limit of channel of bandwidth in the communication path"; and (3) "a maximum number of errors, such as a bit error rate".

Applicant submits that according to the International Telecommunication Union and Federal Standard 1037C, latency is defined to one of ordinary skill

in the art as "an inherent delay of that communication path". This is in other words a transmission delay through a communication path.

The Office has stated that the term "latency" is interchangeable with any delay. Moreover, the Office states that "transmission delay through a communication path" can thus be interchangeably used as "criteria to be taken into consideration" and thus as an acceptable delay before transfer initiation. However, this is not found in any reference and the Office is using impermissible hindsight reconstruction to render claim 1 unpatentable.

Stinson clearly discloses "a maximum latency in data transmitted to and received from the subscriber unit" or a measure of a total time to arrival of the transmitted data at its destination. Stinson does not disclose or suggest any step carried out at a service system of receiving a transfer descriptor indicative of the end points of a required data transfer, and transfer criteria to be met by this transfer with the criteria having at least a cost criterion, and a delay criterion and the delay criterion being indicative of an acceptable delay before transfer initiation.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17

(Fed. Cir. 2000). Evidence of a suggestion, teaching, or motivation to modify a reference may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), Para-Ordinance Mfg., Inc. v. SGS Importers Int'l., Inc., 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995), cert. denied, 117 S. Ct. 80 (1996), although "the suggestion more often comes from the teachings of the pertinent references," In re Rouffet, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998).

The range of sources available, however, does not diminish the requirement for actual evidence. A broad conclusory statement regarding the obviousness of modifying a reference, standing alone, is not "evidence." Thus, when the Office relies on general knowledge to negate patentability (such as making plural elements into a single-piece assembly), that knowledge must be articulated and placed on the record. See In re Lee, 277 F.3d 1338, 1342-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002) and In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). There is no articulation or suggestion in Stinson or any reference for the criteria having at least a cost criterion, and a delay criterion and the delay criterion being indicative of an acceptable delay before transfer initiation.

There is no relationship between latency interpreted as time to arrival of transmitted data at its destination and the delay criterion being indicative of an acceptable delay before transfer initiation as claimed in claim 1.

Zonoun discloses an apparatus for selecting a route to a destination for a data packet. The apparatus has a processor and a table in memory for storing a metric value with the memory coupled to the processor. The processor broadcasts a request for a bid to transfer the data packet on a network where there are more than one path to the destination and receiving at

least one bid in response to the broadcast request.

The bid has a routing metric associated with the transfer of the packet to the destination through a particular path and the routing metric is stored in the table. The processor selects a desired path to the destination based on the received routing metric. Cost and delay values are included within the routing metric. The cost value is the cost in monetary terms (dollars, for example) in sending the packet, while delay is measured in terms of time (for example, seconds). Thus, the host can determine which path provides the most cost savings or which path provides the least delay, in order to select one winning bid as the desired path.

Hilsenrath discloses a least cost routing device being programmed with the least cost route for a given destination for a telephone call. The device uses data disposed on a recorded medium with cost route information for a number of indicated destinations. The device uses the data appropriate for the current time and looks up the least cost route for an indicated destination.

Stinson, Zonoun, Hilsenrath and the combination thereof do not disclose or suggest any steps of receiving a transfer descriptor indicative of the end points of a required data transfer, and of transfer criteria to be met by this transfer with the criteria comprising at least a cost criterion, and a delay criterion being indicative of an acceptably delay before transfer initiation, let alone any step of determining by reference to both current and future data-transfer tariffs whether and, if so, how, the data transfer can be effected within the transfer criteria or instructing initiation of the data transfer in accordance therewith. Reconsideration and withdrawal of the rejection of claim 1 are respectfully requested.

Claims 2, 4, 8, 10, 13 through 15 and 19 depend from claim 1 and are patentable for at least the reasons discussed above for claim 1. Claim 22 is patentable for reasons similar to those argued above for claim 1.

In the Action, claims 3, 5 through 7, 11 through 12, 20 through 21, and 23 through 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stinson in view of Zonoun in view of Hilsenrath, and in further in view of EP Patent No.: 848,560 A2 to Shaffer (hereinafter "Shaffer"). In response, applicant submits that the cited and relied upon Stinson, Zonoun, Hilsenrath and Shaffer do not support a prima facie rejection of obviousness under 35 U.S.C. § 103(a).

Applicant submits that Stinson alone or in combination with Zonoun, Hilsenrath, and Shaffer neither disclose nor suggest applicant's claimed invention. Applicant respectfully traverses this rejection on the grounds that there is no disclosure, suggestion or motivation in any reference for the modification argued by the Office. Also, Stinson, Zonoun, Hilsenrath, Shaffer and the combination thereof, even if technically feasible, which is not admitted as possible, do not render applicant's claimed invention obvious.

Shaffer discloses a method of managing a communication route. The method has the steps of accessing capability to exchange communication data between remotely located sites. The method further has the step of monitoring one or more modes. The monitoring determines present time quality of service parameter values. The method further has the step that the present time quality of service parameter values is either input by a party or is implied. (See col. 8, lines 23 through 26).

The method further has the step of making a preliminary transfer mode selection. This is the least expensive mode that can also guarantee a request. The cost of this least expensive mode is a threshold cost. Thereafter, the

method has the step of examining whether the actual current present time quality of service parameter value is below the threshold cost and meets the requested present time quality of service parameter value, and if so, the mode is changed.

Stinson, Zonoun, Hilsenrath, Shaffer and the combination thereof do not disclose or suggest any method with the steps of receiving a transfer descriptor indicative of, at least generally, the end points of a required data transfer, and of transfer criteria to be met by this transfer, with the criteria comprising at least a cost criterion, and a delay criterion indicative of an acceptably delay before transfer initiation, let alone any step of (b) determining by reference to both current and future data-transfer tariffs whether and, if so, how, the data transfer can be effected within the transfer criteria and step (c) where step (b) produces a positive determination, instructing initiation of the data transfer in accordance therewith. Thus claim 1 is patentable over the cited and relied upon references. Claims 3, 5 through 7, 11 through 12, and 20 depend from claim 1 and are patentable for at least the reasons discussed above for claim 1.

Claims 21, and 23 through 24 are patentable for reasons similar to those discussed above for claim 1 as none of the references discloses any step of receiving a transfer descriptor indicative of a plurality of end points of the data transfer, and a transfer criteria with the transfer criteria having a cost criteria and a delay criteria indicative of an acceptable delay before a transfer initiation, let alone determining by reference to a current data transfer and by reference to a future data transfer, whether the data transfer is complementary to the transfer criteria.

Moreover, none of the references disclose or suggest any step of determining by reference to both current and future data-transfer tariffs whether and, if so, how, the data transfer can be effected within the transfer criteria. In contrast, Shaffer discloses consideration of on-going parameters for

the modes that have the acceptable threshold cost. See col. 11, line 56 through 58 and col. 12, lines 1 through 11. Reconsideration and withdrawal of the rejection of claims 21 and 23 through 24 are respectfully requested.

In view of the foregoing, applicant respectfully submits that all of claims 1 through 15 and 17 through 24 are in condition for allowance and patentably distinguish over the cited and relied upon references. Accordingly, applicant respectfully requests favorable consideration and that the application be passed to allowance.

Respectfully Submitted,

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